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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/611,455

06/30/2003

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ATT030076

1612

34399

7590

12/08/2008

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EXAMINER

INGVOLDSTAD, BENNETT

ART UNIT

PAPER NUMBER

2427

MAIL DATE

DELIVERY MODE

12/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/611,455	Applicant(s) GRAY ET AL.	
	Examiner Bennett Ingvaldstad	Art Unit 2427	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 16 October 2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 16 October 2008 have been fully considered.
3. Applicant has amended the independent claims to recite "the signal including graphical information." Applicant argues that Nakano and Grzeczowski do not meet this limitation. Remarks, pg. 12. This argument is not persuasive.
4. As cited in the rejections, Nakano teaches a notification application on a middle server or on an email server. Figs 8, 9. The notification application notifies the set top box to display an icon when an email has been received by the email server. Paras 0057, 0058. The notification corresponds to the claimed "signal."
5. Considering Nakano's paragraphs 0062 and 0063, various icons may be displayed by the notification application based on a filtering of the email message content. See also Fig 6. Therefore, the icon display signal from the notification

Art Unit: 2427

application must instruct the set top box on which icon to display. However, Nakano is not specific as to whether the icon graphic resides at the set top box or with the notification application or elsewhere.

6. In the case wherein the icon graphic resides with the notification application and is transmitted to the set top box for display, the signal from the notification application comprises “graphical information” because it contains a graphic icon. Alternatively, in the case wherein the icon resides at the set top box or is received from elsewhere for display, the signal is still considered to comprise “graphical information” because it instructs the set top box on which graphic icon to display, the signal thus comprising information about a graphic, that is, “graphic information.”

7. Therefore, based on the broadest reasonable interpretation of “graphic information,” the previous rejections are upheld.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3, 5-14, 16-24, and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (US 2002/0147988) in view of Grzeczowski (US 2004/0049785).

Claim 1: Nakano discloses a method comprising:

determining whether to inform a user of an interactive television service of receipt of an email message (filtering emails before notifying a TV user [para 0013]), the determining made independent of any query by the user of any email account (queries are made by the software program [para 0014]);

responsive to determining to inform the user of the receipt of the email message, generating a signal indicating availability of the email message (a signal is sent to the STB to notify the user by displaying an icon on the screen [0057, 0058]), the signal including graphical information (paras 0062, 0063: information indicating which icon to display is “graphical information”);

Nakano does not further disclose that the signal is inserted into and multiplexed with a content signal.

Grzeczowski discloses a method of informing a user of an interactive television service of receipt of a hot key signal comprising:

inserting the signal into a content signal transmitted to the user through the interactive television service via a network through which the interactive television service is provided (icons displayed onscreen indicating reception of an alert [para 0029] can be transmitted with a cable signal, e.g. in-band or OOB [para 0030]),

wherein inserting the hot key signal into the content signal comprises multiplexing the hot key signal with the content signal and modulating the multiplexed signal for delivery to the user [para 0030].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczkowski in order to send signals multiplexed with television signals [Grzeczkowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczkowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection (e.g. Nakano Fig 2, 56k modem connected to ISP).

Claim 2: Nakano further discloses the method of claim 1, wherein determining whether to inform the user of the interactive television service of receipt of the email message comprises periodically polling a Post Office Protocol (POP) account of the user ([para 0015], server can use POP [para 0052]).

Claim 3: Nakano in view of Grzeczkowski further discloses the method of claim 2, further comprising:

retrieving the email message from the POP account (a middle server can download the email messages [Nakano para 0058]); and

sending the email message to the user as part of the signal (messages are received along with the hot key icon so that the user can immediately view the message [Grzeczkowski para 0027]).

Art Unit: 2427

Claim 5: Nakano further discloses the method of claim 2, wherein the POP account is an account maintained by an Internet Service Provider (ISP) other than the interactive television service provider (the Internet provider and the TV provider are separate [Fig. 3, claim 1]).

Claim 6: Nakano discloses a method comprising:

receiving, as part a content signal sent by an interactive television service to at least one viewer, a signal ... indicating receipt of an email message by a Post Office Protocol (POP) account of a user of an interactive television service (a user is notified by an application (para 0057, 0058) of the receipt of emails (para 0013) at a POP account (para 0052); the signal including graphical information (paras 0062, 0063: information indicating which icon to display is “graphical information”) and wherein the signal is independent of any query by the user or user equipment of any email account (queries are made by the software program [para 0014]),

determining whether the signal is relevant to the user (the STB and the email server communicate using IP [0021], so signal relevancy is determined by IP destination addresses; see also para 0062, 0063: filtering); and

responsive to determining the signal is relevant to the user, displaying on a screen an indication that the signal has been received (para 0057, 0058: an icon is displayed on screen as instructed by notification application).

Nakano does not further disclose that the signal is inserted into and multiplexed with a content signal.

Grzeczkowski discloses a method of informing a user of an interactive television service of receipt of a signal that is multiplexed into the content signal and modulated with the content signal (icons displayed onscreen indicating reception of an alert [para 0029] can be transmitted with a cable signal, e.g. in-band or OOB [para 0030]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczkowski in order to send signals multiplexed with television signals [Grzeczkowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczkowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection [e.g. Nakano Fig 2, 56k modem connected to ISP].

Claim 7: Nakano in view of Grzeczkowski further discloses the method of claim 6, further comprising responsive to receiving an indication that the hot key is accepted, presenting to the user the email message indicated by the hot key signal (the message can be displayed by the user after an icon is shown on screen [Grzeczkowski 0029]).

Art Unit: 2427

Claim 8: Nakano further discloses the method of claim 6, wherein determining whether the signal is relevant to the user comprises determining whether a destination address for the hot key signal is an address of the user (STB and email server communicate via the Internet [Nakano 0021] so IP destination addresses determine relevancy; see also para 0062, 0063: filtering).

Claim 9: Nakano further discloses the method of claim 6, wherein the signal comprises an Internet Protocol (IP) data packet (STB and email server communicate via the Internet [Nakano 0021] so IP packets are used).

Claim 10: Nakano in view of Grzeczowski further discloses the method of claim 9, wherein the Internet Protocol (IP) data packet has a header portion and a body portion, the body portion having a data field containing the email message (Messages are delivered to STB [Grzeczowski para 0029] over IP [Grzeczowski para 0024] and data e.g. messages are contained in the body of IP packets).

Claim 11: Nakano discloses a system comprising:

a content delivery portion connected with one or more content providers to receive and deliver interactive television (TV) content (TV provider 14 [Fig. 3]);

a head-end transport portion connected with the content delivery portion to and delivery content signals from the content delivery portion over a network (TV provider 14 broadcasts to STB 10, Fig. 3);

a hot key generation portion for:

determining whether to inform a user of an interactive television service of receipt of an email message (middle server receives email messages [0058] and determines to notify a user via an on-screen icon [0054]), the determining made independent of any query by the user of any email account (queries are made by the software program [para 0014]), and

responsive to determining to inform the user of the receipt of the email message, generating a signal indicating availability of the email message (notifying a user via an on-screen icon [0054, 0057, 0058]), and wherein the signal includes graphical information (paras 0062, 0063: information indicating which icon to display is “graphical information”).

Nakano does not further disclose that the signal is inserted into and multiplexed with a content signal.

Grzeczowski discloses a method of informing a user of an interactive television service of receipt of a signal that is multiplexed into the content signal and modulated with the content signal (icons displayed onscreen indicating reception of an alert [para 0029] can be transmitted with a cable signal, e.g. in-band or OOB [para 0030]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczowski in order to send signals multiplexed with television signals [Grzeczowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection [e.g. Nakano Fig 2, 56k modem connected to ISP].

Claim 12: Nakano in view of Grzeczowski further discloses the system of claim 11, wherein the head-end transport portion receives the signal from the hot key generation portion, and multiplexes the signal with the content signal (the signal can be transmitted multiplexed with the television signal [Grzeczowski 0030]).

Claim 13 is rejected under the same grounds as claim 2.

Claim 14: Nakano in view of Grzeczowski further discloses the system of claim 13, wherein the hot key generation portion retrieves the email message from the POP account (a middle server can download the email messages [Nakano 0058]) and includes the email message as part of the hot key signal (messages are received along with the hot key icon so that the user can immediately view the message [Grzeczowski 0027]).

Claim 16 is rejected under the same grounds as claim 5.

Claim 17: Nakano discloses a system comprising: a receiver for receiving a signal ... indicating receipt of an email message [0014] by a Post Office Protocol (POP) account [0052] of a user of an interactive television service [Fig. 3]; the signal independent of any query by the user of any email account (queries are made by the software program [para 0014]), and

a processor [Fig. 4] for:

determining whether the signal is relevant to the user (via an IP destination address, since messages are sent as IP packets [0021]; see also para 0062, 0063: filtering) and,

responsive to determining the signal is relevant to the user, displaying on a screen an indication that the signal has been received (notification icon [0016]), the signal including graphical information for display (paras 0062, 0063: information indicating which icon to display is “graphical information”).

Nakano does not further disclose that the signal is inserted into and multiplexed with a content signal.

Grzeczowski discloses a method of informing a user of an interactive television service of receipt of a signal wherein a demodulator portion demodulates the signal with the content signal and a demultiplexor portion

Art Unit: 2427

demultiplexes the signal from the content signal (a DOCSIS modem [para 0030] demodulates and demultiplexes).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczowski in order to send signals multiplexed with television signals [Grzeczowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection [e.g. Nakano Fig 2, 56k modem connected to ISP].

Claims 18-21 are rejected under the same grounds as claims 7-10, respectively.

Claim 22: Nakano discloses a machine-readable medium having stored thereon a series of instructions (software application [0014] residing on middle server [0058]), the instructions, when executed by a processor, cause the processor to:

determine whether to inform a user of an interactive television service of receipt of an email message [para 0014];

responsive to determining to inform the user of the receipt of the email message, generate a signal indicating availability of the email message [para 0014], the signal including graphical information (paras 0062, 0063: information indicating which icon to display is "graphical information"); and

wherein the determination to inform the user of the receipt of the email message is made independent of any query by the user of any email account (queries are made by the software program [para 0014]).

Nakano does not disclose that the instructions cause the processor to:
insert the signal into a content signal transmitted to the user from an interactive television service provider via a network with which the user and the interactive television service provider are connected;

wherein the signal is multiplexed and modulated with the content signal.

Grzeczowski discloses in a related art an interactive television service (user interacts with received messages [0027]) and a machine-readable medium having stored thereon a series of instructions, the instructions, when executed by a processor (an application stores user profiles and determines to send messages based on the user preference [0007-0008]), cause the processor to:

insert the signal into a content signal transmitted to the user from an interactive television service provider via a network with which the user and the interactive television service provider are connected (messages can be sent to STB over television broadcast systems [0030]);

wherein the signal is multiplexed and modulated with the content signal [para 0030].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczowski in order to send signals multiplexed with television signals

[Grzeczowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection [e.g. Nakano Fig 2, 56k modem connected to ISP].

Claims 23-24 and 26 are rejected under the same grounds as claims 2-3 and 5, respectively.

Claim 27: Nakano discloses a machine-readable medium having stored thereon a series of instructions (instructions to enable STB to interface with middle server [0058] and display notifications), the instructions, that when executed by a processor, cause the processor to:

receive, from a receiver ... a signal ... to a user of an interactive television service, the hot key signal indicating receipt of an email message by a Post Office Protocol (POP) account of the user (notifications are sent to screen connected to STB by middle server [0058]), the signal including graphical information (paras 0062, 0063: information indicating which icon to display is "graphical information");

determine whether the signal is relevant to the user (the STB and the email server communicate using IP [0021], so signal relevancy is determined by IP destination addresses; see also para 0062, 0063: filtering); and

responsive to determining the signal is relevant to the user, display on a screen an indication that the signal has been received (notification icon [0016]).

wherein the signal is independent of any query by the user of email account (queries are made by the software program [para 0014]).

Nakano does not further disclose that the signal is demodulated and demultiplexed from a content signal.

Grzeczkowski discloses a method of informing a user of an interactive television service of receipt of a signal that is demultiplexed and demodulated from the content signal (icons displayed onscreen indicating reception of an alert [para 0029] can be transmitted with a cable signal, e.g. in-band or OOB [para 0030]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method disclosed by Nakano with the teaching of Grzeczkowski in order to send signals multiplexed with television signals [Grzeczkowski para 0030] for the purpose of delivering message information to television users who do not have a separate Internet connection [Grzeczkowski para 0003-0005], thereby improving Nakano's method by providing messages to users who do not have Nakano's separate Internet connection [e.g. Nakano Fig 2, 56k modem connected to ISP].

Claims 28-31 are rejected under the same grounds as claims 7-10, respectively.

Art Unit: 2427

10. Claims 4, 15, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (US 2002/0147988) in view of Grzeczowski (US 2004/0049785), further in view of Chatfield (US 2002/0138561).

Claim 4: Nakano in view of Grzeczowski does not further specifically disclose the method of claim 2, wherein the POP account is an account maintained by the interactive television service provider.

Chatfield discloses that it is well known for a television service provider to maintain email accounts (ISP, which can be a cable provider, provides services including email [0007]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the POP account disclosed by Nakano in view of Grzeczowski to be maintained by the interactive television service provider as disclosed by Chatfield for the purpose of gaining higher speed connectivity (Chatfield [0007]).

Claim 15 and 25 are rejected under the same grounds as claim 4.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Ingvoldstad whose telephone number is (571)270-3431. The examiner can normally be reached on M-F 9-5 EST.

Art Unit: 2427

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bennett Ingvaldstad/
Examiner, Art Unit 2427

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2427